

AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on line 6 of page 1 as follows:

B2
The present invention relates to a storage-type data receiver used ~~for broadcast-type~~ for a broadcast-type data distribution service such as text broadcasting or data broadcasting, ~~and communication-type~~ and a communication-type data distribution service such as the Internet, and more specifically, relates to a recording medium on which a data reception processing program is recorded for realizing, exemplarily on a computer, a data reception method and a stored data update method carried out in the storage-type data receiver.

Please amend the paragraph beginning on line 16 of page 1 as follows:

B3
Recently, ~~broadcast-type~~ a broadcast-type data distribution service such as text broadcasting or data broadcasting for distributing data by means of broadcast signals has started. ~~Communication-type~~ A communication-type data distribution service for distributing data through a network such as the Internet has been also introduced. Accordingly, a variety of data receivers have appeared on the market, which are of a type receiving data distributed through such data distribution services and then storing the received data for later use.

Please amend the paragraph beginning on line 5 of page 2 as follows:

B4
FIG. 10 shows the structure of a conventional storage-type data receiver used ~~for broadcast-type~~ for a broadcast-type data distribution service. A conventional storage-type data receiver Arc is provided with a tuner 101, a data extractor 103, a data decoder 105, a data storage 107, and a data presenter 109.

Please amend the paragraph beginning on line 10 of page 2 as follows:

5
In the tuner 101, ~~broadcast~~ a broadcast wave Srf received by an antenna (not shown) is downconverted and demodulated, for generation of a video signal Sv, in accordance with a frequency band of a user selected broadcast channel.

Please amend the paragraph beginning on line 1 of page 3 as follows:

B6
In such ~~conventional~~ a conventional data receiver Arc, however, it is uncertain when distribution data is updated. Therefore, whenever data ~~comes~~, arrives, the data has to be written to the data storage 107. To be specific, even if the newly-provided data is identical to the one already in the data storage 107, the data already in the data storage 107 is overwritten with the data which is newly-provided but identical thereto.

Please amend the paragraph beginning on line 8 of page 3 as follows:

B7
When the data storage 107 is structured by a device being susceptible to deterioration from frequency of data writing ~~thereto~~ thereto, such as hard disk or nonvolatile memory, the same data is repeatedly written thereto more often than necessary to keep the data therein ~~the latest~~ updated. Thus, the life cycle of the data storage 107 gets shorter due to such unnecessary repeated writing.

Please amend the paragraph beginning on line 20 of page 3 as follows:

B8
A first object of the present invention is to provide a storage-type data receiver and a storage-type data reception method capable of ~~cutting down, to a minimum,~~ minimizing the frequency of data writing necessary to keep the storage data ~~the latest~~ updated, and a recording medium on which a storage-type data reception processing program is recorded.

Please amend the paragraph beginning on line 1 of page 4 as follows:

B9
A second object of the present invention is to provide a storage-type data receiver and a storage-type data reception method capable of keeping data in storage ~~the latest~~ updated while ~~cutting down, to a minimum,~~ minimizing the frequency of data writing without constantly setting the tuner to an applicable channel, and a recording medium on which a storage-type data reception processing program is recorded.

Please amend the paragraph beginning on line 8 of page 4 as follows:

B10
A third object of the present invention is to provide a storage-type data receiver and a storage-type data reception method capable of keeping data in storage ~~the latest~~ updated while

cutting down, to a minimum, minimizing the frequency of data writing without constantly supplying power to constituents necessary to receive data, and a recording medium on which a storage-type data reception processing program is recorded.

Please amend the paragraph beginning on line 14 of page 6 as follows:

B11
According to a fifth aspect, in the first aspect, ~~further comprising~~ a power supply controller is provided for controlling power supply to the receiving device according to the data update indication signal.

Please amend the paragraph beginning on line 3 of page 7 as follows:

B12
According to a seventh aspect, in the fifth aspect, the power supply ~~controller~~ controller supplies power to the data update detector regardless of the data update indication signal.

Please amend the paragraph beginning on line 11 of page 7 as follows:

B13
~~According to an eighth aspect, in the third aspect, a storage data identification information device for generating identification information for specifying data to be stored,~~

According to an eighth aspect, in the third aspect, a storage data identification information device is provided for generating identification information for specifying data to be stored and,
according to the identification information, the tuner controller tunes the channel of the tuner to a broadcast channel through which the stored data is distributed.

Please amend the paragraph beginning on line 22 of page 7 as follows:

B14
According to a ninth aspect, in the eighth aspect, ~~further comprising specified~~ a specified data extractor is provided for extracting the specified data to be stored from the received data in accordance with the identification information.

Please amend the paragraph beginning on line 6 of page 9 as follows:

B15
According to a thirteenth aspect, in the tenth aspect, a computer program is provided which is capable of activating a computer in such a manner that a device structured by the computer

program and the computer can carry out the storage-type data reception method as claimed in claim 10: method.

Please amend the paragraph beginning on line 12 of page 9 as follows:

B.16
According to a fourteenth aspect, in the tenth aspect, a computer program is provided which is capable of causing a computer to carry out the storage-type data reception method ~~as claimed in claim 10~~ when the product is run thereon.

Please amend the paragraph beginning on line 17 of page 9 as follows:

B.17
According to a fifteenth aspect, in the tenth aspect, a computer program product stored is stored on a medium readable by a computer, which comprises computer code means capable of carrying out the storage-type data reception method ~~as claimed in claim 10~~ when the product is run thereon.

Please amend the paragraph beginning on line 4 of page 10 as follows:

B.18
FIG. 3 is a flowchart showing the operation of the data receiver shown in FIG. 1 ~~is operated:~~
FIG. 1.

Please amend the paragraph beginning on line 9 of page 10 as follows:

B.19
FIG. 5 is a flowchart showing the operation of the data receiver shown in FIG. 4 ~~is operated:~~
FIG. 4.

Please amend the paragraph beginning on line 13 of page 10 as follows:

B.20
FIG. 7 is a flowchart showing the operation of the data receiver shown in FIG. 6 ~~is operated:~~
FIG. 6.

Please amend the paragraph beginning on line 18 of page 10 as follows:

B.21
FIG. 9 is a flowchart showing the operation of the data receiver shown in FIG. 8 ~~is operated:~~
FIG. 8.

Please amend the paragraph beginning on line 15 of page 11 as follows:

B. 22
A storage-type data receiver Arp1 of this embodiment is provided with a tuner 1, a data extractor 3, a ~~data~~ data decoder 5, a next-update information extractor 7, a next-update information recorder 9, a comparator 11, a storage controller 13, a clock 15, a data storage 17, a data presenter 19, and a power supply 21.

Please amend the paragraph beginning on line 11 of page 13 as follows:

B. 23
In this embodiment, the tuner 1, the data ~~extractor 5~~, extractor 3, and the data decoder 5 construct the source of data to be ~~stored~~; stored. The next-update information extractor 7, the clock 15, and the comparator 11 are provided for detecting the update timing of the data to be stored, and the storage controller 13 and the data storage 17 are provided for storing and reading the data.

~~the next-update information extractor 7, the clock 15, and the comparator 11 are for detecting the update timing of the data to be stored; and~~

~~the storage controller 13 and the data storage 17 are for storing and reading the data.~~

Please amend the paragraph beginning on line 18 of page 13 as follows:

B. 24
In this embodiment, the data ~~decoder 3~~, decoder 5, the next-update information extractor 7, the next-update information recorder 9, the comparator 11, and the storage controller 13 are all the constituents of an in-data processing controller 40. The in-data processing controller 40 is preferably realized by software.

Please amend the paragraph beginning on line 15 of page 17 as follows:

B. 25
As is described in the foregoing, according to the storage-type data receiver Arp1 of this embodiment, only when the decoded data Dd provided by a single data source is updated, the decoded data Dd already stored in the data storage 17 is updated by the newly-provided decoded data Dd. In this manner, the frequency of data writing to the data storage 17 can be ~~cut down to a minimum~~; minimized. To be specific, the data can ~~remain the latest~~ be updated while the deterioration of the data storage 17 ~~being~~ is suppressed.

Please amend the paragraph beginning on line 1 of page 19 as follows:

~~Once the storage-type data receiver Arp2 is started, first of all,~~

B 28
Once the storage-type data receiver Arp2 is started, first of all, in step S4, the user designates a desired channel for reception to the tuner controller 23. The tuner controller 23 records the user designated channel and also generates, for output to the tuner 1, the tuning channel signal St which indicates that the channel.

Please amend the paragraph beginning on line 11 of page 20 as follows:

B 27
Consequently, there is no need to leave the tuner 1 on a channel continuously for data broadcasting, and also the frequency of writing to the data storage 17 can be ~~cut down to a minimum~~ minimized. In this manner, the tuner 1 can be used for another data source except during when the decoded data Dd is being updated, and data can ~~remain the latest~~ be updated with deterioration of the data storage 17 being suppressed.

Please amend the paragraph beginning on line 12 of page 23 as follows:

B 25
As a result, the frequency of writing to the data storage 17 can be ~~cut down to a minimum~~ minimized without constant power supply to any constituent necessary to receive data, and without continuously setting the tuner 1 to ~~an channel~~ a channel to store data.

Please amend the paragraph beginning on line 16 of page 23 as follows:

B 29
Accordingly, the power consumption is reduced, the tuner 1 can be used for another data source except ~~during the data being~~ during when the data is being updated, and the data can ~~remain the latest~~ be updated with the deterioration of the data storage 17 being suppressed.

Please amend the paragraph beginning on line 3 of page 25 as follows:

B 30
Next, by referring to the flowchart shown in FIG. 9, it is described how the storage-type data receiver Arp4 of this embodiment is operated to receive and process data. Note that, the flowchart of this embodiment is additionally provided with step S2 before step S4 S4R in the flowchart of the third embodiment shown in FIG. 7, step S6 between steps S4R and S10, and step S56 between steps

S54 and S60. Further, step S4 is replaced with step S4R. These additionally-provided steps S2, S4R, S6, and S56 are more focused in the operational description next below.

Please amend the paragraph beginning on line 12 of page 25 as follows:

~~Once the storage-type data receiver Arp4 is started, first of all,~~

B31
Once the storage-type data receiver Arp4 is started, first of all, in step S2, ~~the user~~ the user operates the storage program register 29 so that the program identification information Ip indicating the broadcast programs whose decoded data Dd favorably required to be stored is registered in the storage program extractor 27. The procedure then goes to the next step S4. S4R.

Please amend the paragraph beginning on line 23 of page 25 as follows:

B32
In step S6, it is determined whether or not the currently distributed program is the program designated in step S2. Herein, the details of the currently distributed program can be referred to the decoded data Dd provided by the ~~date~~ data decoder 5. The determination becomes Yes when the desired program is distributed, and then the procedure goes to the next step S10.

Please amend the paragraph beginning on line 20 of page 26 as follows:

B33
As is described in the foregoing, according to the storage-type data receiver Arp4 of this embodiment, the power supply necessary to receive data is turned on only when to-be-stored data each distributed from a plurality of data sources at a given time is updated, and the tuner 1 is tuned to the corresponding channel, and then the data Dd is written to the data storage 17. As a result, the frequency of writing to the data storage 17 can be ~~cut down to a minimum~~ minimized without continuous power supply to any constituent necessary to receive data, and without setting the tuner 1 to the corresponding channel to store data.

Please amend the paragraph beginning on line 5 of page 27 as follows:

B34
Accordingly, the power consumption is reduced, the tuner 1 can be used for another data source except ~~during the data being~~ during when the data is being updated, and further the data can ~~remain the latest~~ be updated with the deterioration of the data storage 17 being suppressed.